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Strawberry PLANTS THAT GROW

1908

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WHITTEN'S

CATALOG OF

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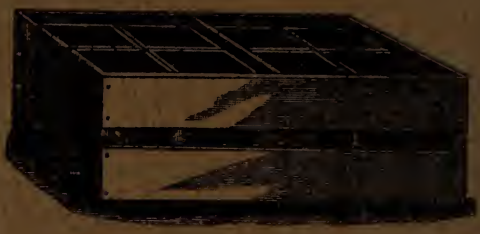

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(Mention this Catalog.)

INTRODUCTORY

In again addressing my friends in this my Annual Catalog at the beginning of another year I wish to thank them for their hearty and continued support. The fact that we are able to please and hold our customers year after year is one of the pleasantest features of our business. Of course, we do not, nor can any one please all. However, it is our earnest endeavor to give entire satisfaction and if we fail through any fault of our own we are always ready to make amends where possible. We do not expect to "stand for" mistakes or carelessness of transportation companies, but always "make good" any shortage, misdirection or other blunder of ourselves or our packers. We only ask that we be notified of such error upon receipt of goods.

It may not be amiss to say a word about weather conditions the past season. The "snow storm" of October 10, 1906, with the subsequent hard freezing (the mercury down to six or eight degrees above zero) injured all fruit trees and vines much worse than we anticipated at the time. Nearly all peach and Japan plum trees have been taken out as dead, and the few left are badly injured. Grapes and all bush fruits were killed to the "snow line." The reason for this disastrous condition was not due so much to the extreme of temperature as to the fact that there had been absolutely no killing frosts previously, and all vegetation was in full leaf and flow of sap. Such a condition being rarely if ever experienced before. Personally we suffered in our orchards, but our growing nursery stock was not injured, as it was covered with about a foot of soft snow at the time of the severest cold. Our strawberry fields were nearly all covered during the winter, but as we had a very moist season, plenty of snow or rain, there was little noticable difference between those covered and those without. Spring "opened up" rather early in March but continued rains, with cold winds retarded growth until it was well into the month of June before settled warm weather came. The entire season with the exception of a few days in August has been excessively wet. These conditions have been bad for our plantings on low land, while on the higher land we have a better growth than usual, both strawberry plants and raspberry tips going into the winter in the best possible condition. We shall cover our Strawberry fields for the winter, and expect to be able to send out as fine stock as can be grown the coming season.

We have had complaint in the past that some of our varieties of strawberry plants (notably Warfield, Crescent, Senator Dunlap, and others of that type) were "small" and "worthless." Of course, this complaint was not from experienced strawberry growers, for all such realize that there is a great difference in the manner of growth of varieties. Those like Dornan, Bubach, Clyde, etc., which make very few runners will make much **larger** plants than those of Warfield type, which set so many and make **small** plants. These **small** plants, if thrifty, will grow and make a full row and bear as large a crop in the "matted" row as the heavier growing plants. Generally the Warfield type has only one fruit stem to the plant, while Dornan and that type usually have several "crowns" and a greater number of fruit stems to each individual plant. For the grower who is able to give high culture, on a very strong, rich soil the latter class grown in hills or hedge row would perhaps prove most profitable. However, for the ordinary grower, the smaller type grown in half, or full matted rows, would prove as profitable, requiring much less work in their cultivation.

We have said before, and wish to repeat it, do not condemn a variety from one season's experience, as another year may show it very differently, also different soil, or location sometimes changes a variety very materially. Then, too, the season of ripening will vary according to locality, some that we class as late may ripen earlier, or those described as extra early be nearer midseason. We can only give general conditions and do not mean to misrepresent. I have never urged my friends to set largely of untried "novelties," but rather to test the newer sorts upon their own soil in a small way at first. I do not list any that I am not satisfied have merit. Each year we drop some from our list; not always because we think them poor, but because we have enough that are better and that succeed over a larger territory.

Our growing nursery stock has been inspected by the State Inspector of Nurseries and Orchards, and by him declared apparently free from dangerous insects or disease. A copy of his certificate will be attached to each shipment.

From the prevalence of San Jose Scale many states have enacted laws requiring the fumigation with hydrocyanic acid gas of all nursery stock shipped into their borders; to comply with these laws we have erected a fumigating house and are prepared to fumigate all stock shipped if so desired. Patrons living in states where this is required will please notify us when ordering. This law does not include strawberry plants, but raspberry and blackberry plants are included.

Our strawberry plants are all fresh dug at time of shipping, as we do not try to winter any in cellar.

I wish to emphasize this statement as in the past some have claimed that my plants have been held over winter in cellar. Let me say here that I never did this nor have I ever seen others that practiced such methods.

In propagating strawberry plants for sale we always set from one year old beds which have not fruited. We also set the different varieties in blocks of several rows each, thereby obviating the danger of mixture, liable where different sorts are set in alternate rows. In dig-

ging, we usually take up the entire row discarding the original plants and such of the tip plants, not well rooted, therefore we have no exhausted stock to send out.

In digging strawberry plants our help work in the field when the weather is fit, lifting the plants with "potato hooks" then taking the plants from the soil, stripping off the surplus leaves and runners and tying in neat bunches of twenty-five (we always aim to put in twenty-six). After tying, the bunch is carefully heeled in until the required number of that variety is dug, thus the roots are not exposed to the air for any great length of time.

When the weather is unfit for the work to be comfortably done in the field, the plants are picked up in baskets and carried to the packing house or other shelter where they are stripped and bunched as before described. But after the plants have been handled in this way the roots never straighten out so nicely as when bunched at once upon being taken from the soil; hence I think the plan of stripping and tying in the field preferable, notwithstanding others claim to the contrary.

Experienced strawberry growers know that a slightly wilted plant is much surer to grow than one that has been kept too moist and packed with too wet moss or other packing material. There is nothing that will cause strawberry plants to heat in shipping quicker than to have them too wet when packed.

In other seasons we have claimed, and wish again to repeat it, that both our soil and climate seem especially adapted to the growth of strawberries. We also claim that we grow and can furnish just as good plants as any other grower, the claims of wonderful superiority of some others notwithstanding.

It will be a great help to me if my friends will speak a good word for my plants, if they have the opportunity, and it will be thoroughly appreciated.

If more than one catalog is received, please hand one to some one whom you think will be interested in small fruits.

Number of Plants Required to Set One Acre

1x1	foot	43,560	6x3	feet	2,420
2x1	foot	21,780	6x4	feet	1,815
2x2	feet	10,890	6x5	feet	1,452
3x1	foot	14,520	6x6	feet	1,210
3x2	feet	7,270	7x1	foot	6,222
3x3	feet	4,840	7x2	feet	3,111
4x1	foot	10,890	7x3	feet	2,074
4x2	feet	4,445	7x4	feet	1,555
4x3	feet	3,630	7x5	feet	1,244
4x4	feet	2,722	7x6	feet	1,037
5x1	foot	8,712	7x7	feet	888
5x2	feet	4,356	8x3	feet	1,815
5x3	feet	2,904	8x4	feet	1,361
5x4	feet	2,178	8x5	feet	1,089
5x5	feet	1,724	8x6	feet	905
6x1	foot	7,260	8x7	feet	777
6x2	feet	3,630	8x8	feet	680

Instructions to Purchaser.

MY LOCATION.—I am located in southwestern Michigan, about fifteen miles south of St. Joseph, near Lake Michigan, in what is known as the "Great Fruit Belt."

RAILROAD CONNECTIONS are good. Our line of road, the Pere Marquette, runs mail and express trains direct to Chicago; time about three hours. Within fifty miles this line connects with the great trunk lines, east, west, north and south.

MAIL ORDERS.—I can ship strawberry plants by mail when so desired, and on small amounts for long distance this is much the cheaper transportation, but not so safe as express, as the mode of packing is of necessity different; not having the chance for ventilation, plants are more likely to heat enroute.

I much prefer express shipments and must decline any large orders to be shipped by mail.

BY EXPRESS.—This is the safest way to ship live plants, as it makes fast time with the least liability of delay. Sometimes when transferred to another company the charges seem rather high, but when the nature of the service is considered it is really the cheapest in the end.

We have only the United States Express Company; however, we find little difficulty in reaching most of our customers by this company and its connections.

All express companies now bill nursery stock at "General Special" rate, being a reduction of twenty per cent. from the merchandise rate, also making it a "Pound" rate with a minimum charge of thirty-five cents.

We can also get a low rate on long distance shipments of eight cents per pound, with a limit of ten dollars in valuation for each shipment. This is of considerable benefit to our customers west of the Rocky Mountains, where the rate is often ten or twelve dollars per hundred pounds.

FREIGHT.—Early in the season I can ship by freight with comparative safety, but there is a possibility of delay and consequent loss. Parties ordering stock shipped by freight will have to take the risk, as I cannot be responsible for loss, if any, on stock shipped in this manner.

I do not undertake to guarantee safe arrival by any of these modes of transportation, as I have no control of stock after it leaves my hands; however, it is to my interest, as well as the interest of my customers, to have stock reach the purchaser in good condition, and I shall always endeavor to so pack and forward goods that they may prove satisfactory.

MY PACKING is done in the **best possible** manner and under my personal care. I use light crates or baskets with plenty of moss for packing strawberry plants and barrels and boxes for other sorts, making no charge for the work or package. My long experience in this line gives me a decided advantage in the matter of **safe packing.** I also have experienced help who have worked with me several years. Of course, we do not claim infallibility, and are always ready to make reparation where at fault.

Shipping season begins about April 1st, or possibly last week in March, and continues until about 1st to 10th of May.

TERMS.—One-fourth cash with order, balance before stock is shipped. Or I will ship C. O. D., if one-half of the amount accompanies the order and purchaser will agree to pay return charges on the money.

REMITTANCES may be made either by New York or Chicago draft, postoffice or express order, or where none of these may be had, by registered letter.

RATES.—Fifty plants of one variety at hundred rates; or three hundred plants of one variety at thousand rates. When an order amounts to $10.00 or over, it may be counted at the thousand rate, regardless of number taken. No order booked for less than $1.00.

MY PRICES are as a general thing very low, but on large lists we are sometimes able to give better rates and invite all wanting **large lots** to write for estimates.

By **large lots** I mean a quantity; ten to twenty thousand and up.

Do not write for **special prices** on two or three thousand.

ORDER BLANKS.—Use the order blank enclosed when ordering, being careful to write your name **plainly,** giving Postoffice, County and State, and do this every time you write. Also keep a **copy** of your order yourself. Be particular to say how goods are to be sent, whether by mail, express or freight.

All orders are acknowledged immediately upon receipt. If you do not receive an acknowledgement in a reasonable time, write again.

WHEN TO ORDER.—Early, by all means. The rule generally is, "First come, first served," also the early orders find full stock, while later some varieties are liable to be exhausted. Orders are filled in rotation as received, except sometimes our southern patrons are ready to set in advance of those further north; these orders we usually crowd first and get them out as soon as frost is out of the ground in spring.

Our customers will please remember that the time for filling orders is short, and it would facilitate our work greatly if orders were sent before the rush. This is also an advantage to our customers, for they get what they order, no varieties being sold out. To encourage these early orders I will make this offer:

PREMIUM OFFER.—On all orders at catalog rates received during January and February with cash in full, I will allow a cash discount of 5 per cent., or for every dollar sent during these months you may order additional stock to the amount of ten cents. (See inside front cover of this catalog for other premium offers.)

SUBSTITUTION.—In ordering, please state whether I shall substitute some other variety in case the kind ordered should be exhausted. If not forbidden I claim the right to substitute something of equal value, but always label true to name. I always aim to substitute sort similar in quality and season and always something listed at equal or higher rate.

GUARANTEE.—While I take great pains to have stock true to name and hold myself ready upon proper proof to refund money or replace any that proves untrue, it is mutually agreed that I shall not be liable for a greater sum than the amounts paid for such stock.

REFERENCES.—I refer to the United States Express Agent or Postmaster at Bridgman; Union Banking Company, St. Joseph; or Bradstreet's Commercial Reports, as to my standing and reliability. Parties writing any one of the above, please enclose stamp for reply.

How to Set and Grow Strawberries

I have had numerous applications for instruction along this line, and while I have endeavored to give a partial description of my method of culture, I can hardly give any general rules that should apply to all localities.

THE SOIL AND LOCATION best adapted to strawberry culture will vary somewhat in different sections. In a general way we have said that any soil that would grow good crops of corn or potatoes would grow good strawberries, and while this seems to be a pretty safe rule, it is also true that in order to grow them to the best advantage it is necessary to have soil especially adapted. One of the first requisites of the ripening fruit is moisture, and care should be taken that this is provided. Hence a very dry or loose, sandy soil would not be a safe location, although in moist seasons a fair crop might be harvested. Neither is a stiff clay adapted to strawberry growth, as very early in season it cannot be worked without becoming cloddy, and later is apt to bake, and the plants will suffer more than on sandy soil. It would seem that a sandy loam or loam with slight mixture of clay should if properly handled give the best results.

DRAINAGE.—Having chosen a soil retentive of moisture, it next becomes necessary to prepare for proper drainage in case of excessive rainfall, unless the natural lay of the land is such that no water will stand upon the surface. Tile drains are the only practical ones to use. Open ditches will, perhaps, answer this purpose, but are unsatisfactory in many ways. They occupy too much land and are in the way of cultivation, while tile drains are much more convenient and fully as effective. In sandy soil I would advise using tile not smaller than four inches in diameter, and larger for mains, according to length and amount of water to carry. I have laid a good many three-inch tile and have had to take them up and replace with larger on account of their filling with sand. Of course this was where we had only moderate fall.

My idea is to hold the moisture in the soil at a depth of about two feet. Then in case of drouth we can by frequent cultivation bring moisture near the surface where most needed.

FROST.—In planning your strawberry field care should be taken to avoid frosty locations, such as very low land near marshes or lakes, also valley where there is no chance for circulation of air, as these localities are very liable to heavy frosts, when higher land or that more open to circulation would show very little, if any. A hard frost at blooming time often ruins the entire crop, hence the desirability of choosing a situation as much exempt as possible.

MANURING.—Where the soil is at all deficient in fertility, I would advise using well-rotted stable manure. If this can be applied to the soil the year previous and some cultivated or hoed crop grown, then the following season the land must be in the **best possible** condition for setting strawberries.

Some writers advocate the plowing under of a clover sod in preparation for this crop, but I am always doubtful of this method on account of the white grub, the larvae of the May beetle, which is quite apt to infest such soil. Perhaps if only recent seedings were so treated. this pest would not trouble, but I would warn all against plowing up an old sod to set strawberries. as the grubs would be almost sure to destroy the greater portion of the plants set. Never plow under green or

very coarse and strawey stable manure just before setting strawberry plants, as it would cause the soil to dry out very quickly and will also burn the roots killing the plants wherever it comes in contact with them. This is important and should be avoided if possible. Wood ashes make a good fertilizer on most soils, also bone meal (or ground bone) where not too expensive may generally be used to good advantage. Either of these should be applied after plowing, and worked into the soil while dragging.

FITTING THE SOIL.—Having selected your site with reference to proper drainage and fertility of the soil, begin by plowing as late in the fall as possible before the ground freezes. This late plowing is beneficial in that the soil lays up loose and open, that frost may act upon it more readily, also leaving it in a condition to absorb more moisture in the spring, which may be drawn upon later in the season in case of drouth. It also tends to kill a great many insects which live over winter in the soil, some of which are quite troublesome and injurious to strawberry growth. The white grub is undoubtedly the worst of these, but as they seldom if ever lay their eggs in freshly cultivated soil, if my previous suggestions regarding the preparation of the site have been followed there will be no danger.

I like to plow quite deep where there is good depth of soil, eight inches at least, unless this brings the subsoil to the surface, which should not be done under any circumstances. As soon in the spring as the season has fairly opened, just as early as the soil will work up mellow, we harrow the land with a springtooth harrow (any other implement that will do the work thoroughly will do as well). There is not much likelihood of doing this part of the work too thoroughly, as it is much easier to properly fit the land before setting the plants than afterward. We generally harrow with the furrows first then diagonally each way. I would then immediately follow with a heavy roller, or if you have no roller at hand, a plank drag (or "float" as we call it) heavily weighted will do as well. This firming of the soil is important as it is almost impossible to set plants properly if the soil is not reasonably level and firm at the surface.

MARKING OUT.—This may be done in any manner that will give a very shallow straight mark to set by. A light sled marker that will make three or four marks at once is very handy and could be made by almost any one. The spacing of the rows will depend upon the method of growing chosen for your field.

IF FOR HILL CULTURE, which consists of growing the single plants, cutting off all runners as fast as made, which causes the plants to "stool out" or grow additional "crowns" which will each produce fruit stems, the rows should be from two and one-half to three feet apart and sixteen to eighteen inches in the rows. If to be cultivated both ways or in check row then two or two and one-half feet would be about right.

I would recommend this method to all those who wish to grow fancy berries and are willing to give the extra culture needed. This system requires a rich or fertile soil; it certainly would not pay on poor soil. Then, too, only certain varieties seem adapted to this treatment. Sorts like Bubach, Dornan and others of this class, while those like Warfield, Michel, Crescent or Excelsior and other heavy runners, would prove disappointing.

THE HEDGE ROW is quite similar to hill culture. The rows should be from two and one-half to three feet and twenty to thirty inches in the row; the freer runners the greater distance. The first runners are

turned into the row and held in place with soil until they have struck root, generally about every six or eight inches in nearly a straight row, later all extra runners are kept cut off. There are different implements which are manufactured for this purpose, but I think a good sharp hoe in the hands of an active workman will be fully as satisfactory as the machines. Plants grown by either of these methods are claimed to remain healthy and fruitful for several seasons.

THE HALF MATTED ROW should be set about three and one-half feet apart and eighteen to twenty-four inches in the row. The runners are all kept off until about the middle of summer, then allowed to root until row is about one foot wide, after this all runners should be cut off. This should give a fine show for fruit.

THE MATTED ROW is the system adopted by the greatest majority of fruit growers, although without doubt other methods would prove more profitable. The rows are set four to four and one-half feet apart and plants from twenty to thirty inches in the row. The runners are all allowed to root, running the cultivator always in the same direction and narrowing it up as required. At times, if the season happens to be favorable to plant growth, and the soil is rich, almost the entire surfact will be covered with plants. This method might be allowable on poor soil where fewer plants would be grown or with varieties that make few plants ordinarily, but if Michel, Warfield or other heavy runners are allowed to grow in this manner they will prove very disappointing from the fact that there will be many blank or barren plants. Varieties of this type would do better in half matted rows.

SETTING OUT.—As to manner of setting the plants there are so many theories advanced which differ from mine that I feel rather backward about giving my method. But as it is very simple and requires no **special implement** to work with, using instead a **common spade** for opening the holes, and not requiring any very complicated movements in placing the plants in the soil, I will give what I consider the easiest as well as the best method. I am well aware that some **good authorities** condemn the use of the spade for this purpose, but it is and has been used in this community—which is one of the greatest strawberry sections of the state—for the last thirty years or more, and I do not think any one can show a more evenly perfect stand than we have in this region. I can show blocks of a number of acres with scarcely a plant missing.

The first operation is the opening of the holes, which is done just ahead of the setting, not leaving them to dry out. In doing this the operator proceeds along the row, thrusting the spade in the center of the mark already laid out, spacing equal distances according to methods chosen, quite close if to be grown in hills, and farther if for matted row.

This should be nearly the depth of the spade and if the soil is properly prepared this will not require much effort, but if the soil should be very solid it will require some pressure of the foot to sink it to the proper depth.

The spade should be given a **slight** motion to right and then to left; when withdrawn if the conditions are right you will have a V-shaped opening which will readily receive the roots of the plant. Care should be taken not to **weave** the spade back and forth too much, as this tends to open too wide a space at the bottom of hole, making it hard to close properly and leaving a chance for air space, causing plants to dry out and die.

The greatest pains should be taken in getting the plants into the soil, and here is where you should place

your most careful workmen; or better still do this part yourself, if possible. Have the plants set in a shallow basket or other receptacle, with the roots moistened—if the roots are very long they should be cut back to about three inches. The plant should be held by the upper part of the crown and placed in the spade opening at about the same depth it grew, which should bring the crown even with the surface; now let the operator press the soil firmly against the plant with a good, strong pressure of the foot, first on one side and then on the other, being careful to see that the opening is entirely closed that air may not enter and dry out the roots.

CULTIVATION.—As soon after setting as practicable the surface soil should be stirred very shallow, being careful not to disturb the roots of the plants, also not to cover up the crowns or heart of the plant, the latter will cause the plants to die, especially in damp weather, by rotting or smothering the crown. This early cultivation is essential for several reasons: First to be sure that all the openings near the plant are filled, also to preserve moisture if the weather is dry by arresting evaporation through capillary attraction. This shallow cultivation should be kept up through the season, never allowing the surface to crust. There are a great many makes of cultivators which will do this work all right. Generally we use a one-horse steel frame with twelve or fourteen straight teeth. This simply pulverizes the surface, and one can work very close to the plants, but it is necessary to do some hand work with hoe in order to loosen all the surface and keep down weeds. The latter is very important, as one cannot successfully grow two crops on the ground at the same time.

Perhaps I should qualify this claim for shallow cultivation a bit by saying to treat the soil in this way only in dry seasons or on very light and dry soil, as if the season is wet or the soil low and heavy it becomes necessary to stir the soil deeper in order that it may dry out somewhat.

The blossoms should be pinched out of all spring-set plants, as it is not advisable to let them ripen fruit the first season, as it weakens the growth of the plants and is liable to kill them outright.

All runners should be cut off until about the first of July, when if matted row is wanted, the runners may be allowed to root until the desired row is obtained, after which all runners should be kept trimmed off.

MULCHING OR WINTER COVERING.—As soon as growth ceases in the fall, and before ground freezes hard, the surface of field should be well covered with some sort of mulching, either long straw, wild hay, corn stalks, or other litter, if free from foul weed seed, will answer the purpose. This season we have grown several acres of sowed corn on purpose for this covering and find that it works quite well. We sowed quite early, about the middle of May, broadcasting about one and one-half bushels per acre and allowing the crop to stand until thoroughly ripened before mowing with machine, leaving on the ground as it fell until just about time to use as covering when it was taken up with a horse rake and hauled onto the strawberry field. We find that this material "stays put" better than the wild hay, as we have had very high winds the past fall and have had to replace the hay, and in some parts of the field this second handling was worse than the first on account of its having been rolled and twisted into all manner of shapes. For this reason I would advise spreading hay or straw when slightly damp if possible and placing a little soil upon the top at short intervals, which will help to keep it in place in case of high wind.

Some advise using coarse stable manure as a cover-

ing and if free from grass seed this might be advisable as it would both fertilize and protect the vines from frost. However, I generally "fight shy" of stable manure on plants that I wish to fruit the second season or for longer period, as I have sometimes seen a good stand of clover and timothy on what was supposed to have been a strawberry field.

As soon as growth commences in the spring this covering should be taken nearly or entirely off the plants, but may be left between the rows as a mulch to preserve moisture, also to keep the fruit clean at picking time.

RENEWING AN OLD BED.—We seldom try to keep a strawberry field longer than the second season, however, it usually pays to pick a second crop although some think it better policy to set a new field each spring and plow down the old one after fruiting, thinking that with this system the land is not so apt to be run or become seeded to noxious weeds. Many plow under the old beds after fruiting and sow some quick growing crop to plow under again, such as cowpeas, or other legume, where season is apt to be hot; buckwheat or rye for more northern latitudes. We have tried sowing corn in order to grow a crop for covering material, but this does not return anything to the soil and should not be practised unless manure is applied at time of sowing.

Many different methods of renewing an old bed are suggested nowadays and I feel rather diffident about giving instruction along this line. However, if the matted row system has been followed and the field kept mulched, it will be necessary to get rid of the covering material first and there is no better way than by burning, if season is dry enough to do this quickly. If field is at all weedy it should be mowed, then loosen mulch and if very heavy over plants remove partially to space between the rows; when thoroughly dry, and a **brisk wind** is blowing (just before a shower if possible) set your fires on the **windward** side and let burn over **quickly as possible.**

If properly done you will have a **clean** field and you may think your plants are all killed. Instead you will have killed many injurious insects and fungi. It will be necessary to commence cultivation at once and if the matted row is too wide we take a one horse turning plow and turn a furrow away from each side of the rows making a "back furrow" or ridge in the middles. While the rows are in this shape we go over them with a hoe cutting out a part of the old plants and whatever weeds may have gained a foothold. If the weather should be hot and dry it will be necessary to hasten this part of the work and to commence working down the ridges at once. We find that an ordinary "double shovel" or corn plow does best for first time through then following with either one or two horse cultivator until the middles are thoroughly worked out and soil carried up to the row again. If an inch of fresh soil is covered over the crowns it will be no detriment, but rather a benefit in urging a new root system to start above the old. Cultivation should be continued through the growing season as needed.

With a season of reasonable moisture this manner of treating a field will surprise the uninitiated with the remarkable growth made, and by fall it should look as well as the year previous. The only chance for failure would be a protracted drouth at the time of firing, or burning over without wind, when the heat would be apt to injure the crown of plants and perhaps kill them entirely. If hill or hedge row were used the plow would not be needed, but commence with cultivator immediately after firing.

STRAWBERRIES.

All strawberry blossoms are either staminate—also called perfect—or pistillate, generally called imperfect.

The imperfect varieties, which are all marked (Imp.) in catalog, should have a perfect variety, marked (Per.) set every third or fourth row to properly pollenize the blossoms of the imperfect sorts.

There seems to be a mistaken idea with some that this mixing of varieties is necessary with the perfect as well as the imperfect sorts; but this is not so. The perfect sorts are self pollenizing and will bear as well if set by themselves.

When the imperfect sorts are properly pollenized they are considered by some as more prolific. However, this may be there surely is no reason for any prejudice against them.

Success depends in a great measure upon getting healthy stock, true to name. This is the kind we always aim to send out.

If by mail, add 10 cents per 25, 25 cents per 100 for postage. At thousand rates, by express or freight.

SOME NEW VARIETIES.

ABINGTON.—(Per.)—This new strawberry was introduced last season by Lester Blanchard, of Abington, Mass., from which town the berry seems to have taken its name. Mr. Blanchard, in his description, says that it was found on his farm as a chance seedling in the spring of 1895. A strong staminate blossom, making it a good pollenizer for late pistillate sorts. A strong grower and a good plant maker. This I can attest, as plants which I set last spring have made a fine row of strong and thrifty plants. I have never seen the fruit, but the introducer claims the berries are of a large size, as large as Bubach and better shape and color, being a bright red, very firm and of good quality; also, that in ten years of fruiting it has never failed to produce a good crop of large berries, being more productive in matted row or under poor culture than any berry of its class. Its fuiting season is long, making it a good variety to set with late pistillates.

The above was my last year's description. Having a small block left undisturbed by digging I had a fair chance to test this sort and although the season was very wet the Abington kept bright and healthy, ripening all its fruit and holding its size well to the end of the season. While I would not class it as of extreme high quality, neither is it of poor quality, but is firm, bright red, and of pleasing appearance in the crate, making it a good market sort and as such I would recommend it to any growing for a distant or home market. I have a large block of these plants for coming season and will price them with other standards.

Twenty-five, 15c; hundred, 50c; thousand, $3.00.

CARDINAL.—(Imp.)—Probably this has been more prominently before the public for the last two years than any other berry. It was originated, or rather discovered, in 1896 by Mr. Geo. J. Streator, a well known Ohio horticulturist, now in California, and introduced

two years ago by the Templin Company, of Calla, Ohio. We have been familiar with this splendid berry for four years, and our faith in it lives and grows. The plant is perfect, large and luxuriant, and sends out many sturdy runners, which take root readily and make strong plants. The leaves are smooth and handsome, and very large and thick, furnishing abundant shelter for the blooms and berries. The fruit is large, though not the largest, nearly round, obtusely pointed, and beautifully smooth and uniform. The color is a rich, brilliant red—no white or green tips—and the flesh is fully as dark as the surface. It is firm enough for a distant market, and at the same time delicate and tempting. The flavor is sprightly and sweet. The seeds are on the surface, which is so perfect in texture that the berries can be handled like plums. The Cardinal is not a berry that is surpassingly fine in some respects and deficient in others, but a superior all-round variety, adapted to all purposes, all soils, all modes of culture. It ripens with the medium sorts, and makes a long season.

The above description is taken from catalog of M. Crawford, of Ohio, from whom I purchased plants of this variety last spring. Never having seen it in fruit I am unable to give any personal description of it. Plants that I received last spring were set on rather low land and owing to wet season I failed to get a good stand, but while they last can supply at following prices:

Twenty-five, 20c; hundred, 60c; thousand, $3.50.

COMMONWEALTH.—(Per.)—Originated by Wm. H. Monroe, of Massachusetts, who says of it:

"Commonwealth is the outcome of a desire and an effort to produce a berry which would perceptibly lengthen the strawberry season. In the Commonwealth we have a berry that is as large as the largest, as productive as any of the largest, as fine flavored, as solid, and as dark colored as any. It is smooth (similar to the Jucunda in shape), and very juicy. It has a strong staminate blossom.

"It is late. On the 17th day of July, 1902, as good berries were picked as during its season; Marshall, Glen Mary and McKinley, side by side with it, being gone. The last berries were picked July 22d.

"The plant is a good strong grower, not so rank as the Marshall, hardy, shows no sign of rust, a fair plant maker, setting its plants at medium distance from the parent. The Massachusetts Horticultural Society, always ready to recognize special merit, awarded the Commonwealth first prize in competition July 5, 1902, and July 11, 1903."

I fruited this the past season on a small block, and while our season was such, owing to rainy weather during the ripening, that no variety could do its best, still the Commonwealth gave us the longest season of fruiting of any sort, as we picked the last few quarts on these several days after Stevens Late, Abington, North Shore, and other late sorts were entirely gone.

It seems to show Sharpless parentage and has the same fault that old favorite used to have, that of ripening its berries with green tips. However, it is a much better shaped berry than the old Sharpless and is of a darker, richer red in color when fully ripened, and of good quality; being very firm and a good keeper, it will make an excellent shipper.

Even with its one fault I feel safe in recommending a trial of this sort as **latest of all.** Being a good plant maker I have a large stock and am going to offer them low.

Twenty-five, 20c; hundred, 60c; thousand, $3.50.

STEVENS' LATE CHAMPION.—(Per.)—This new late variety originated in New Jersey; seems to do well wherever tested. The originator describes it as follows:

"Very large, fine flavored, bright color, good shipper, a fine bed maker, a heavy yielder, fine foliage, ranging from twelve to fourteen inches high, with a good fruit stem. This berry averaged 7,556 quarts per acre in 1902, netting $666.96 per acre; selling as high as 22 cents per quart in New York market last season. It has been tested on all kinds of soil and will grow successfully where any strawberry will grow. It will stand a drouth better than any other berry ever grown in this section.

"Its name, 'Champion,' was given it by a lot of berry growers, some saying it would challenge the world.

"It ripens later than the Gandy Prize, and lasts until the Fourth of July any season. It has never shown any sign of rust. The cap, which is double, has always kept green until the last of the season."

The above is part of the description given in my last year's catalog. I have fruited this variety in small way for the past two seasons, but under rather unfavorable conditions both times. However, I have been well pleased with its productiveness and fine appearance. Without doubt it is a seedling of Gandy being very similar in growth of vine and in appearance of fruit, although much more prolific than Gandy ever was with me. I wish all of my friends would give this variety a trial as I feel confident that it will please all those wanting a late berry for either home use or market. The bloom is strongly staminate making it a good pollenizer for mid-season to late pistillate sorts. Being such a thrifty plant maker I have an extra large stock of this variety and am going to offer it very low for so new a sort.

Twenty-five, 15c; hundred, 50c; thousand, $3.00.

NORTH SHORE.—(Per.)—This is a new variety that I have never cataloged before. I received plants last spring from C. S. Pratt, of Reading, Massachusetts, who introduced the "Sample" in 1898. As I have not seen the North Shore in fruit I will give Mr. Pratt's description as taken from his catalog.

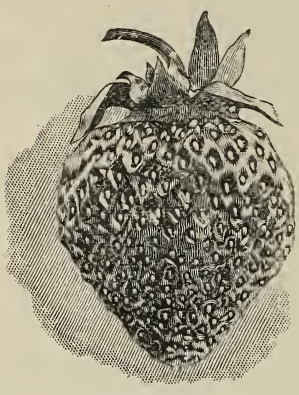
"This magnificent berry is a seedling of the Brandywine and like its parent is a fine berry to plant with pistillates, by all odds the finest staminate berry ever sent out and is just what market men have been looking for. It is a large berry, as large as any berry grown. It is one of the finest berries I ever grew for market. It will stand any amount of handling and not soften up in the hands. Market men will take it every time in preference to anything else on account of its fine keeping qualities, and in the crates it is a beauty. It is one of the finest family berries I have. It has a flavor such as I never saw in any strawberry before, very much like lemonade, only very sweet. The North Shore is too good to sell, and just right to use at home or to give to one's best friends. A fine one to set with the Sample for a fertilizer."

The above is part of my description of North Shore as given in 1907 catalog. I fruited this sort in a small way the past season and while it did not prove to be a heavy cropper the fruit was of finest quality, being very firm and solid and of rich dark red color to center, making it a fine berry for canning or preserving. The plant shows a slight tendency to rust, but this did not seem to affect the fruit. I have only a light supply of these which I will sell while they last at following prices:

Twenty-five, 20c; hundred, 60c; thousand, $3.50.

EXTRA EARLY SORTS

LUTHER.—(Per.)—Or, August Luther, as some prefer to call it, was originated by Mr. A. Luther, of Missouri, and grown by him several seasons before it was offered for sale. The Ohio Experiment Station was first to call attention to it, giving the following report in 1897: "From A. Luther, perfect, un-named seedling, plants vigorous and prolific, berries medium to large, conical, usually with long slender point, light scarlet, flesh light red of good quality, valuable for its earliness. Is far more prolific than Michel's Early and far larger. Earlier, larger and more prolific than Rio. It is regarded as the best early variety tested at the United States Agricultural Station."



LUTHER.

In former years I have headed my list of **"extra earlies"** with the Luther, and I still consider it the equal of any of our well tried sorts, and far superior to Michel's Early, Johnson's Early, or Palmer's, varieties which I have dropped from my list this season. I do not hesitate to recommend Luther as an early sort, for either home use or market.

Twenty-five, 15c; hundred, 50c; thousand, $2.75.

EXCELSIOR.—(Per.)—An extra early berry. Has given us a good crop of berries. Berry is dark red, of good size, one of the best shippers. It is a good plant maker. Plant healthy, blossom perfect. It is claimed to be a seedling of the Wilson crossed with Hoffman. Originated in Arkansas.

Some growers claim this as the best early market variety, and where dark colored, tart berries are wanted, this sort will surely please.

Twenty-five, 15c; hundred, 50c; thousand, $2.00.

CLIMAX.—(Per.)—I clip the following description from J. H. Hale's catalog:

"Climax is a seedling of great old Bubach, fertilized by Hoffman's Early, resulting in a cross which, while combining many of the good qualities of both parents, surpasses either in perfection of plant and berry. The general type of plant is somewhat like Hoffman, though with much heavier leaf and fruit-stalks to a plant, and much broader and thicker leaves; perfect blossoms, three to six strong fruit stalks to a plant, and each of these perfect. A large number of superb berries, of size as great as Bubach, as uniform as Gandy, and ripening extremely early, along with Hoffman and Michel's Early. Is one of the most healthy and best of plants. A perfect bloomer; enormously productive of medium large, perfectly formed, pointed, globular, rich, dark glossy red berries of high quality, and one of the very earliest to ripen."

With me this has been disappointing and I have only a few plants to offer.

Twenty-five, 20c; hundred, 60c; thousand, $3.50.

SECOND EARLY VARIETIES.

BEDER WOOD.—(Per.)—This is generally conceded to be one of the very best early varieties for home use or market. It is a splendid grower, making a large number of strong runners. It has a perfect blossom and is **immensely productive.** Fruit of good size, light red, medium firmness and good quality. One of the best to plant with early blooming pistillate varieties.

I feel that we have not said enough in favor of this variety and that it has been neglected in our desire for something new. It certainly is a much better market berry than a lot of the newer sorts that are given lengthy descriptions and loudly praised. Its worst feature is its color, which is a little too light. I would recommend it as a reliable sort for market purposes.

While this sort could hardly be classed as a **firm or hard** berry, it has a peculiarly dry or spongy nature which enables shipping it long distances without injury.

Twenty-five, 15c; hundred, 50c; thousand, $2.00.

SENATOR DUNLAP.—(Per.)—This is comparatively a new variety introduced by M. Crawford a few years ago, and is certainly a great acquisition to the list of standard sorts.

I think this might well be called a perfect flowered Warfield, as their habit of growth is almost identical and the fruit is quite similar in appearance. It is a very free runner, which becomes a fault on moist, rich soil unless the plants are kept thinned out. The introducer says: "We have the greatest confidence in this variety and believe that it will in the near future take its place among the more prominent standard kinds. The plant is almost perfect in its way. We have several times called attention to its toughness and ability to endure hardships. It is small, slim, very deep-rooted, and as great a runner as the Warfield. With us it has always proven very productive. The fruit is generally large, never of the largest size, however; is conical in form, regular, never misshapen, bright or slightly dark red, very glossy, firm, a splendid keeper and shipper, most excellent in quality, and one of the best canning berries we have ever known. In wet seasons and when too ripe the fruit is inclined to become 'salvy' in texture. Its season is second early and it bears a long time."

I can only repeat what I have said in other seasons, that I consider this **one of the best** varieties that we have growing, either for home use or for market, and would urge all to surely include this in their list.

On rich, moist soil it is apt to set too many plants, and care must be taken to restrict this extra growth in order to get best results.

Twenty-five, 15c; hundred, 50c; thousand, $2.25.

WARFIELD.—(Imp.)—It is not immensely large but its great beauty, firmness, earliness, good flavor, productiveness and vigor, combined with good size, make it exceedingly popular. Ripens with Crescent and is superseding that variety for a reliable market berry. Without doubt there is more of this variety grown each year than of any other. Its popularity seems to be universal. It is a good plant maker, and we hold the price low on that account.

I think Warfield with Senator Dunlap as a pollenizer, makes a team that is hard to beat and would stake my reputation as a strawberry grower on these varieties for profit.

Unlike Crescent, this variety will not do its best on

light, sandy or gravelly soil, but should be planted on reasonably strong soil to assure best results.

Twenty-five, 15c; hundred, 50c; thousand, $2.00.

CRESCENT.—(Imp.)—This is a very prolific berry, bearing profusely even under neglect. In growth it is very vigorous and hardy, and produces better if the vines are not allowed to mat. They should be thinned even if the hoe has to be used. Fruit colors on all sides at once. A great cropper; early. This has been rightly termed the lazy man's berry, as it seems to be able to thrive under neglect, although it readily responds to better treatment. This is perhaps the best variety for light and sandy soils.

This variety at one time was the standard market sort for this section, as grown in matted row. But with the advent of Warfield the Crescent was dropped by a great majority of growers, as the newer Warfield promised to outclass it as a market sort, being of higher quality. However, of recent years the Warfield does not seem to be giving the satisfaction it formerly has done and many growers are again turning their attention to the old Crescent. Stock of this variety that is pure is scarce.

I thought I had it and so claimed last season, but found when I came to fruit it, that I had Warfield mixed with them. As I had already set a new block from the same rows I have again for this year a block of Crescent and Warfield mixed probably about equal quantities of each.

If one is not over particular and only wants an early market sort, these with Beder Wood as a pollenizer, would give good results. I will furnish these together with enough Beder Wood to pollenize, at $1.50 per thousand.

HAVERLAND.—(Imp.)—This is one of the best early market sorts, and seems to do well in all sections. It makes a thrifty plant growth. Berries are large and of a peculiar longish shape, though very regular and even, holding out well to the end of the season. The color is rather **light** red, which may be considered a fault by some, but they make such a handsome appearance in box or basket that they nearly all sell for top price in market. About the only weak point I have discovered in the Haverland is that the fruit stems are tall and unable to stand up under the weight of fruit as it ripens, consequently they should be mulched with straw to keep them from the dirt. This peculiarity of growth makes fine picking, as the berries lay out in sight requiring no movement of the vines to find them. Another good point in their favor is the ability to withstand frost at blooming time often bearing a full crop of perfect fruit when other sorts are badly damaged. There is such a demand for plants of this variety that the supply nearly always fails.

Twenty-five, 15c; hundred, 50c; thousand, $3.00.

CLYDE.—(Per.)—"The foliage is light green in color and makes a fine growth of vigorous plants the first season but is so extremely productive that the whole vigor of the plant seems to go to fruit and does not provide enough foliage during fruiting season to protect the berries. The plants are strong and always have an abundance of long roots, which, even in the absence of sufficient foliage helps the variety to withstand dry weather and brings its crop to maturity under surprisingly unfavorable conditions. But for this weakness of foliage the Clyde would have attained greater popularity than has even been accorded any second early variety. The fruit is as large as the Bubach and

nearly or quite a week earlier with dry season and plenty of sun. It is an excellent variety."

I clip the above description from W. F. Allen's catalog, as it seems to cover all points pretty well. My stock of plants of this variety is very limited and I cannot promise to fill orders if received late.

Twenty-five, 20c; hundred, 60c; thousand, $3.50.

OOM PAUL.—(Per.)—The introducer claims this to be one of the largest strawberries grown; claiming that six berries filled a quart box. Supposed to be a seedling of Bubach pollenized with Jessie, and takes the form and shape of Jessie. It is also claimed that last pickings never run small as so many sorts do.

Large healthy plant, which makes a moderate amount of runners. The fruit is long, large, sometimes nattened and is a little irregular. Color dark red, both inside and out; flesh is quite firm and of good quality. The Ohio Experiment Station says: "A fine large berry of good quality and worthy of a careful trial for home market."

Twenty-five, 20c; hundred, 60c; thousand, $3.50.

SPLENDID.—(Per.)—Originated at Sterling, Illinois. Plant a vigorous grower, equal to Warfield in this respect. Blossoms perfect. Berries are borne on tall fruit stalks and are large, firm, and of fine color. Ripens evenly all over, globular, very productive. Few, if any blanks. No mistake can be made in using this variety to pollenize Warfield, Crescent and other pistillates. Early to mid-season.

Twenty-five, 15c; hundred, 50c; thousand, $2.75.

LOVETT.—(Per.)—No person need hesitate to plant this variety for either home use or market, as it succeeds generally in any soil or locality. It is one of the tough, hardy varieties that will never disappoint the grower. It has a perfect blossom and bears heavily. The fruit is from medium to large size, conical, firm and of good color and quality. One of the best to use as a pollenizer for pistillate sorts.

Twenty-five, 15c; hundred, 50c; thousand, $2.00.

MIDSEASON TO LATER VARIETIES

BUBACH.—(Imp.)—Fruit large and handsome, roundish, conical, bright scarlet, moderately firm, of fair quality. Plant a strong grower with a large healthy foliage and very productive. Succeeds on light or heavy soil. Desirable for home use or near market. One of the best. Season early to medium. This is an old standby and is deservedly popular. In plant growth it is vigorous, but does not throw out excess of runners, hence it is best grown in hedge or half-matted row.

This variety is perhaps as well known and as widely disseminated as any grown, and while it is perhaps not as popular as it was several years ago, still we always run out of stock long before the close of the season. While it is hardly firm enough for long distance shipping still it will hold up for ordinary marketing and is one of the largest berries grown.

I have an unusually fine block of this sort for the coming season's trade and would advise a trial by all wanting a large berry.

Twenty-five, 20c; hundred, 60c; thousand, $3.50.

DORNAN.—(Per.)—(Uncle Jim.)—Introduced season of 1902 by Flansburgh & Pierson as Uncle Jim, but later the State Horticultural Society changed the name to "Dornan," after the discoverer, J. F. Dornan, of Glenn, Michigan, who has fruited it for several seasons.

"The plant is large and healthy, a strong grower, making a good row of well-rooted stocky plants. The berries are very large, heart shaped and uniform, beautiful and attractive. Flesh red when fully ripe. An excellent canner and a most desirable shipper. The variety has a perfect blossom and is wonderfully productive. Mr. Dornan states that it will stand up and pick for from four to five weeks, and produce twice as many cases per acre as any other variety. Season medium to late. We wish to say we have grown and tested over 200 named varieties besides other hundreds of unnamed seedlings, and we consider the Uncle Jim the finest of them all."—Introducers.

Plants of this variety are always in such great demand that I have never been able to give it a fair test in way of fruiting, but the past spring we had parts of a few rows that were on low, heavy soil, which were skipped by the diggers. Some of these plants were simply immense, and at fruiting time were one mass of berries, and nearly all **big ones,** too. The only fault that we, as "plant growers," find with the Dornan is that they do not make plants enough, while the few runners that do root are so large that they are almost unwieldy in packing. Of course, this is no detriment to the purchaser, but it tends to keep the price higher than it would otherwise be. We have a fair stock for this season's trade, and would urge all to test it on their own soil.

The above description is taken from a previous issue of this catalog and I don't think that I can add anything of importance to it at this time unless it be to say that Dornan still holds its place as one of the best large berries, also that while we class it as midseason, it holds its fruit very late, ripening the last berries and making a very long season. ,

Without doubt this is the strongest growing plant of any we have listed, and is always bright and healthy.

Twenty-five, 20c; hundred, 60c; thousand, $3.50.

MARIE.—(Imp.)—This is not a "new" sort, but has not been very generally disseminated and is therefore "new" to a great many growers. It is a wonderfully firm and fine appearing berry, making it first-class as a market sort. A little too sour for some tastes. I give below the introducer's description:

"Beyond doubt the most prolific and profitable berry in existence today. In yield we will put it up against any new or old variety. In point of beauty and general appearance when placed on sale it has no equal. It was grown from seed of Crescent fertilized with Cumberland in 1892. As a seedling it showed great promise. We planted for field culture as soon as sufficient number of plants were obtained, and as yet have failed to detect any weak points in either fruit or plant of this grand variety. The plants are good growers, making plenty of runners for a good crop, and show no signs of disease. The blossom is imperfect, season same as Bubach and Haviland. Equally as large as Bubach, Glen Mary or Brandywine, and yielding with any variety in our 40-acre fruit plantation. Besides, it is the most attractive in appearance when picked and ready for market of any in our entire collection. The berries are round as a ball, dark crimson in color, flesh dark and quality first-class, holding up in size to the very last picking."

I can recommend it as a promising market variety and urge all to give it a trial.

Twenty-five, 15c; hundred, 50c; thousand, $3.00.

GLEN MARY.—"This variety, introduced by me in the spring of 1896, is today one of the leading standard varieties of the country. It has proven especially valu-

able in New England and the West. Its beautiful color, large size and immense productiveness make it a general favorite. Its plants are large and long-rooted, and the fruit is firm enough to make a good shipping berry, its quality is good enough to make it sell. For size it is at the head of the procession. I would say, however, that it doesn't do as well in the South as in the North and West. The demand for Glen Mary plants has always exceeded the supply."—W. F. Allen.

While this is not a strong staminate bloomer, it furnishes pollen enough to fertilize its own bloom, although it would not do to set with others as a pollenizer.

My stock of this variety is not large and price a little higher.

Twenty-five, 20c; hundred, 60c; thousand, $3.50.

POCOMOKE.—(Per.)—The originator says: Originated near Pocomoke river; was found growing where there had been some Wilson and Sharpless strawberries dumped, and is supposed to be a seedling of the old Wilson crossed by the Sharpless. The berry is round, conical, and resembles the old Wilson, but is much larger. One of the best varieties in existence, not only for its enormous productiveness, but on account of its beauty, adaptability to all soils, its foliage enduring the dry, hot weather (which quality is rare with some varieties), its large size, its deep red color, its firmness, its high flavor. The plant is a strong, robust grower, with deep roots and lots of them, perfect blossoms and is an enormous yielder of large red berries. It ripens evenly and is one of the best shippers yet produced."

This proves to be one of the **very best** sorts we have on the list, and I do not hesitate to recommend it either for home or for market.

Our stock of this variety is very limited and we shall have to raise price a little.

Twenty-five, 20c; hundred, 60c; thousand, $3.50.

WM. BELT.—(Per.)—From M. Crawford's catalog: "Introduced by us about eleven years ago. We might describe it by saying that it has every good characteristic save one,—it is rather subject to rust. Although its single failing is well known it is extensively planted by a large number for its many excellencies. We have seen it produce berries over nine inches in circumference in sixty days from the time it was transplanted. The plant is very large and sends out plenty of strong runners. It is very productive.

"William Belt, staminate, introduced by Matthew Crawford, Cuyahoga Falls, Ohio, has been fruited here for the past ten years, and is more appreciated than ever. A susceptibility to rust is claimed to lessen its value in some localities, but it has never shown weakness of any kind here. The foliage is healthy and resistent, and the plant uniformly productive under fair culture. For table use through the entire bearing season it has not been excelled by any variety that has come to our notice. When fairly ripened it is sweet and rich, and less likely to cause digestive disturbances than most other kinds. It is a reliable cropper; the berries run large and well-formed after the first coxcombed fruit of the cluster has been picked. It has sufficient pollen to crop well if grown alone, and acts as a good pollenizer for pistillates, if planted every fifth row. The only just criticism we can make after this long acquaintance is that thoroughly ripened berries are too soft for long shipment, though firm enough for nearby markets. Belt succeeds in both light and heavy soil, but should have good root and air drainage, and always have full exposure to the sun."—The Rural New Yorker.

Twenty-five, 15c; hundred, 50c; thousand, $3.25.

LATE TO VERY LATE VARIETIES

AROMA.—(Per.)—"I shall head the list of late varieties with this sort as I think all things considered it is entitled to the front rank. In plant growth this variety is near perfection, being of good, bright color and very healthy foliage. Have never seen it rust on my place. While fruit is quite similar to Gandy, the growth is very different, making fewer plants and stronger ones. The berries are large to very large, and hold up well to end of season.

"It has been claimed to produce twice as much fruit as Gandy, but I would hardly think it probable, where both were grown under same conditions. The quality of fruit is good, the color of berry is against it where dark colored fruit is the standard of excellence, as it is more like Gandy, inclined to be light. I can personally recommend this sort to anyone wanting a late market berry."

If large, bright colored berries, late in season are an object to you, then try Aroma and you will be pleased.

Twenty-five, 20c; hundred, 60c; thousand, $3.50.

UNCLE SAM.—(Per.)—This new seedling berry originated in Ohio, and is a promising sort. The introducer's description is as follows: "Large to very large, will average larger than Bubach; ripens with the Bubach, but has a much longer season, a perfect bloom and is much more prolific. Have picked Uncle Sam berries as early as May 22 and on July 5, of the same year, picked berries one and one-half inches in diameter. There are no green ends, buttons or nubbins on first year's fruiting. Color red, quality delicious, foliage strong and vigorous; berries of Uncle Sam can be picked two weeks after most other berries are gone."

This variety has never been "boomed" as a great many others have consequently is not very widely disseminated. I have fruited it in a small way for a number of years and have found it a very satisfactory sort, always making a good row of strong and healthy plants and giving a heavy yield of very handsome fruit late in the season. It is a strong staminate and is a good pollenizer for late pistillate sorts. I have more plants than usual of this sort to offer for coming season and ask all to give it a trial on my recommendation.

Twenty-five, 15c; hundred, 50c; thousand, $3.00.

BRANDYWINE.—(Per.)—This has proved so satisfactory with all who have grown it that it is consequently in large demand. It is comparatively new and of great value by reason of its productiveness, large size, beauty and good quality, which renders it especially desirable for the home garden. The berries are glossy crimson, very handsome, firm and solid, excellent in quality, with fine aromatic flavor. The berries color all over evenly and retain a good size to the last, ripening in succession and every berry maturing fully. Plant is remarkably vigorous, hardy and exceedingly productive, and its foliage is large, clean and healthy. The amateur will delight in such a superb variety, which with his good soil and careful culture, will give him magnificent returns. Midseason to late. It is also an excellent pollenizer for midseason to late pistillates.

Twenty-five, 15c; hundred, 50c; thousand, $3.00.

RIDGEWAY.—(Per.)—Plant large and stocky; makes a large number of strong healthy plants; leaf large, broad, heavy and dark green. Blossoms perfect, a good pollenizer for pistillate varieties, berry large, form nearly round, color crimson, firm, will stand shipping to distant market, quality good. Will command good prices. Same season as Gandy and much better cropper

with me. Shipping the berries to Chicago, they attracted the attention of our commission merchant who claimed it was the finest strawberry he had seen on the market. The one defect I have found in them is the toughness of the stem making it hard to pick without slipping the calyx or hull.

Twenty-five, 20c; hundred, 60c; thousand, $3.00.

SAMPLE.—(Imp.)—This I consider the best of the late sorts yet introduced. The halftone showing a stem of green berries was taken from nature and at a time when most early sorts had finished ripening their fruit, while the Sample were just beginning to color; as I remember, there was only one fully ripe berry on the stem. This tends to show the lateness of the variety.

SAMPLE.

This was not an exceptionally large cluster, but just a fair average as taken from a pot given ordinary field culture without any manuring or other special treatment.

The introducer says: "Large size and fine quality; quite firm; continues a long time in fruit. The berries are large to the last. For the marketman it is the best strawberry ever grown. I have nothing in my grounds that will begin to fruit like it. It will yield as many berries as the Haverland and will average as large as the Bubach. Colors all over at once. A berry that will do that is the best one yet found. There is not a weak spot in it. Foliage perfect, fruit perfect."

Every year Sample seems to grow in favor and the demand for plants always exceeds the supply. The past season was no exception and we had to dig every plant we had growing and still were unable to fill all orders. We have tried to grow a large supply for this season, but have been somewhat disappointed in the yield of our blocks of this variety. However, we have a fair stock of good plants but would advise placing orders as early as possible in order to be sure of getting them.

Twenty-five, 20c; hundred, 60c; thousand, $3.50.

GANDY.—(Per.)—Description taken from J. T. Lovett's catalog: "Introduced by me in 1888, and now more largely grown by far than any other variety—beyond doubt there were more quarts of berries of this variety marketed in the United States during the past few years than of all other varieties of the strawberry put together. It ripens late to very late, and the berries are large to very large, bluntly conical, of the firmest texture and bright flame-colored—which color they retain until they decay; but in flavor it is rather acid and not of the highest quality. It is very nearly perfect in vigor and growth of plant yet it is but a moderately productive variety, except under high culture and upon very moist land. It originated in a meadow in South Jersey and its peculiarities are its preference for very moist land and the fact that it usually yields more bountifully the second than the first year. Of special value for canning."

This sort has always been popular as a late market variety, but does not do well on a light sandy soil, and is apt to be disappointing when planted in such location. I have no hesitation in recommending this to all as **one of the best** late sorts for home use or market. The only fault that I have ever heard found with it was its "shy bearing" when planted on uncongenial soil.

Twenty-five, 15c; hundred, 50c; thousand, $3.00.

WORDS OF APPRECIATION

Iowa City, Ia., May 6, 1907.

C. E. Whitten, Bridgman, Mich.

Dear Sir:—Strawberry plants and currants came all O. K. They are very nice and we notice very generous count. Many thanks for the prompt delivery. You may expect my order next year if all is well.

Respectfully yours.
F. O. Craig.

Benton Harbor, Mich.,

Dear Sir:—Strawberry plants were received Friday, April 5th. They came in good condition. I am very well pleased with them.

Yours truly,
Mrs. Zulina Wright.

Flow, N. Y., April 19, 1907.

C. E. Whitten, Bridgman, Mich.

Dear Sir:—I wish to say in sending you another order for plants that I have grown and fruited plants from your stock, from ———— and from ———— side by side with plants from the so-called pedigree stock and am frank to say they were just as vigorous, productive and satisfactory in every way as the so-called "thoroughbred pedigree plants." The name is "catchy" and misleading and the common average customer does not know any better than to believe the quasi-scientific claims for their superiority. I am sorry to see the misnomer apparently gaining in favor. I have never set any better plants than those from your farm.

Yours respectfully,
John W. W————

RASPBERRIES

Culture.—Any soil that will produce good field crops is suitable for raspberries. Pulverize the ground thoroughly and manure liberally. The red or sucker variety should be planted in rows six feet apart, with the plants three feet apart in the rows, requiring 2,400 plants per acre.

The cap varieties for field culture should be planted in rows seven feet apart with the plants three feet six inches apart in rows; requiring 1,725 plants per acre. In garden culture plant four feet apart each way.

RED OR SUCKER VARIETIES

THE EATON.—"A new red raspberry and is entirely distinct from all other varieties. In character of growth, in size, color, firmness, quality and yield of fruit; in length of season and in all strong points of

EATON.

merit it stands unequaled and alone. A variety that is at once perfectly healthy in root and foliage, and hardy, coming through our most severe winters in prime condition; a strong, "not tall and slender," but a sturdy grower, throwing out many laterals and fruiting to the tips and from every lateral, a sight to see. An immense cropper, by far outyielding any red raspberry we have ever known while the fruit is extraordinary large and handsome, firm and of the highest quality."

Above is the introducer's description. I have fruited it only in a limited way and should want to test it farther before giving any verdict upon its merits. So far as I have seen, it is very hardy in cane and also very prolific. The one fault I have noticed is that the berries seem to have a tendency to crumble under certain conditions.

I have a fair stock of plants of this variety, of my own growing, to offer this year and shall lower the price materially and would advise all who are interested in growing raspberries for market to test this new sort in a small way.

Dozen, $1.50; twenty-five, $2.25; hundred, $7.50; thousand, $50.00.

EARLY KING.—This new variety is coming to the front rapidly. Among its many points of excellence are these: Extreme earliness, canes strong growing and hardy, never having winter killed since its introduction. Very prolific bearer of large, firm and bright colored fruit. I would recommend it as best **early red raspberry.**

My stock of plants is very limited.

Twenty-five, 40c; hundred, $1.25; thousand, $10.00.

CUTHBERT or QUEEN OF THE MARKET.—A remarkably strong, hardy variety. Stands the northern winds and southern summers equal to any. Berry very large, sometimes measuring three inches around; conical, rich crimson, very handsome, and so firm they can be shipped hundreds of miles by rail in good condition. Flavor is rich, sweet and luscious. The leading market variety for main crop. Without doubt the most popular red raspberry known to the fruit growers of today, and it certainly leads all others in points of productiveness, quality and appearance, and by long odds in acreage grown.

Twenty-five, 30c; hundred, 75c; thousand, $5.00.

MILLER RED RASPBERRY.—The bush is a stout healthy, vigorous grower, not quite so tall as the Cuthbert, but rather more stocky and dwarfish. It is well calculated to hold up the immense crops of fruit with which it loads itself. The introducer claims: Extreme hardiness, as productive as any; one of the earliest to ripen; an excellent shipper; of good quality and attractive color.

Twenty-five, 25c; hundred, 65c; thousand, $4.50.

THOMPSON'S EARLY.—One of the best early varieties. Plant a good grower and hardy. Commences to ripen before strawberries are gone. A very profitable early variety to grow for market.

Twenty-five, 25c; hundred, 60c; thousand, $4.00.

PURPLE CAP

COLUMBIAN.—The Columbian is a variety of the Shaffer type, of remarkable vigor and productiveness. It is hardy and propagates from tips. Fruit very large, often an inch in diameter, shape somewhat conical, color dark red, bordering on purple; adheres firmly to the stem and will dry on the bush if not picked; seeds small and deeply imbedded in a rich, juicy pulp with a distinct flavor of its own, making it a most delicious table berry.

In my estimation this is the most valuable purple cap yet introduced, as it is more hardy in cane and certainly more prolific, and fruit of larger size than any other sort I am acquainted with.

Twenty-five, 50c; hundred, $1.75; thousand, $15.00.

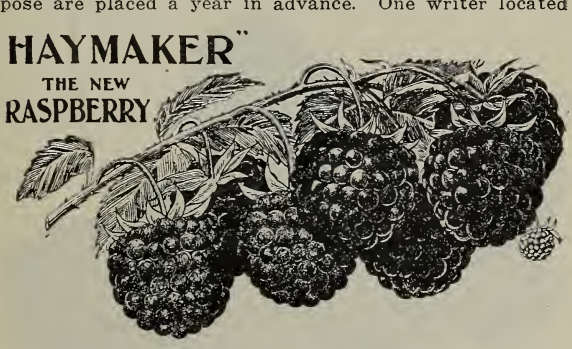
CARDINAL.—"This is a new variety of Shaffer type and is claimed to be superior to either Shaffer or Columbian, both in hardiness of cane and productiveness. It originated in Kansas and the introducer claims it has stood a temperature of thirty-five degrees below zero without injury. It also withstands drouth and heat as well, holding its foliage, which is described as thick, short, broad and deeply wrinkled, dark green in color,

until the severe cold of December. It is a very strong grower, with bright red bark and very few small thorns. It propagates from tip same as a black cap. The berries large, dark red, firm as to texture, with an agreeable, pure, rich flavor which is brought to its highest perfection when canned or cooked in pies. Their season is rather late and they hold on well."

After fruiting this sort I am somewhat disappointed in its behavior. It is not as prolific as Columbian and not much different as to quality. It seems to partake a little more of the **red raspberry** type than either Shaffer or Columbian. This will meet the wants of those who object to the suckering of red varieties.

Twenty-five, 50c; hundred, $1.75.

HAYMAKER.—"The Haymaker is a purple cap, not so dark as Columbian or Shaffer, and much larger and firmer than either of those varieties, never crumbles, and stands up well for shipping. Sample crates have been shipped to distant points with entire satisfaction. It is a berry to grow for either home use or market. The originator has found it the **most profitable berry** ever raised for market, and has never yet been able to supply the local demand. So much of a favorite has the Haymaker become that local growers have said that it ruined the sale of other varieties. Very popular as a **canning** berry. Many orders for berries for this purpose are placed a year in advance. One writer located



near a canning factory has thus written: "If anyone about here had several acres of it in bearing he could dispose of the entire crop to good advantage to the canning factory."

Above is part of the introducer's description: I have fruited Haymaker for two years and do not find it preferable to Columbian. Possibly the appearance of Haymaker is a little finer as picked, having less of "bloom" which hurts the appearance of Columbian somewhat, but in hardiness of cane, and productiveness the Columbian will lead.

Twenty-five, 50c; hundred, $1.75.

Fulton, Ohio, May 4, 1907.

Mr. C. E. Whitten.

Dear Sir:—I received the strawberries this evening. They were in good shape. I took them home and opened them up. I will say they were in the best shape of any plants I ever received. I will look to you for my berry plants in the future. Thanking you for prompt attention, I remain,

Yours,
A. A. Koerner.

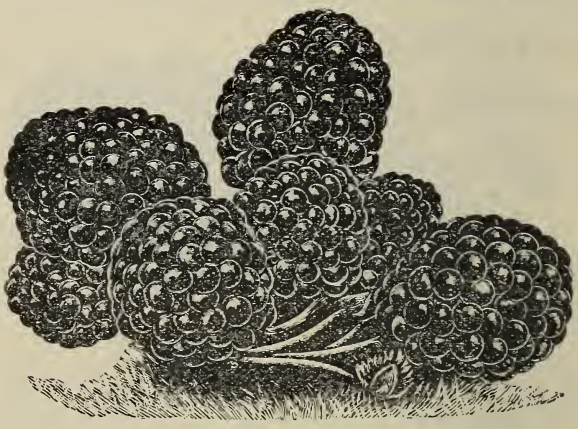
BLACK OR CAP VARIETIES

These are all Propagated from Tips.

EUREKA.—This is one of the largest early black raspberries that I am acquainted with, it is fully as large as the Cumberland and of as good quality, being ten days earlier in season of ripening. Several years ago I discarded this sort on account of Anthracnose which disease this variety seemed very subject to. In the spring of 1905, I set a small block of Eureka and have had no trouble so far with this pest. My stock is limited and can only offer it in a small way.

Twenty-five, 35c; hundred, $1.00.

CUMBERLAND.—This has been named the **"Business Blackcap"** by the introducers, and has been loudly praised by all who have grown it. It is a very large berry of fine flavor, rich and sweet, and of jet black color with slight bloom. The cane is of extreme hardiness, very strong growing and free from **anthracnose.** In other seasons I have praised this sort as the **best** black raspberry for either home use or market, but the past season was very wet and rainy at picking time and while all late varieties were more or less water soaked,



CUMBERLAND.

Cumberland seemed about the poorest both as to flavor and firmness. If this had been my first and only experience with the variety I should have condemned it as worthless, but we know that in ordinary seasons it is fine.

The above was last season's description; this year this has proven the best black raspberry we had in fruiting, and all points considered I would recommend it for a late sort.

Twenty-five 35c; hundred, $1.00; thousand, $8.00.

GREGG.—The Michigan Experiment Station says of this variety in their 1903 report: "Gregg is the most popular blackcap grown and adapts itself to almost any condition. With good culture there are few superior. The canes are strong, productive, but not quite hardy; berries are attractive and of choice quality. Twelve berries weighing one ounce as compared with Ohio thirty to the ounce."

My experience is that Gregg is quite hardy on well drained soil, but does not love wet feet and winter kills badly on wet ground. The berries are covered with a whitish blue bloom which in its first dissemination was mistaken for mould or mildew and hindered the sale of fruit on the market; but since becoming better known this sort is very popular in all sections, and I do not hesitate to class it as the **best** late market sort.

Twenty-five, 35c; hundred, 85c; thousand, $7.00.

KANSAS.—For a good second early blackcap there is nothing better than this. It possesses all the valuable attributes of a profitable market sort, and its large size and attractive appearance insures for it always a ready sale and good prices. The fruit is nearly as large as the Gregg and with much less bloom, handsome, firm and of fine quality. Its canes are of strong growth; entirely hardy and prolific; with tough healthy, clean foliage. Its season is about second early—later than Souhegan, but much earlier than Gregg.

Twenty-five, 30c; hundred, 75c; thousand, $6.50.

CONRATH.—Resembles Gregg in many ways, but is much earlier and is firm, sweet and good—maintaining its large size to the last picking. The canes are of ironclad hardiness, very prolific, and make a strong, healthy growth. It ripens early.

Twenty-five, 35c; hundred, 85c; thousand, $7.00.

PALMER.—I close the list with this sort, as of late this is being cut out of most collections on account of its small size. However, where grown to perfection—that is,—on good. strong soil and with good cultivation, it will prove a wonderful cropper and is perhaps the earliest of any black raspberry to ripen, making it very profitable as a market sort.

I have only a few plants to offer.

Twenty-five, 30c; hundred, 75c; thousand, $6.50.

WHAT OTHERS SAY

Gibson City, Ill., April 26, 1907.

C. E. Whitten, Bridgman, Mich.

Dear Sir:—Plants received yesterday evening, and they are apparently in fine condition. The plants so far opened are the finest I ever received. Very few real small ones. Have set 600 of them and only found two plants but what I thought would grow. Many thanks for extras. You can depend on my future orders.

Yours respectively,

H. W. Torrence.

Boone, Ia., April 8, 1907.

C. E. Whitten.

Dear Sir:—Just received your letter today and will let you know that the plants came also. I was very much surprised to find them in No. 1 shape, all started and not dried out, and they were surely well packed or they would never have reached here in such good condition. They left your place March 27th and got here April 8th. Thanks for good plants and good packing.

Yours,

A. C. Kingman.

(This shipment went by freight.)

Dundee, N. Y., May 15, 1907.

Mr. C. E. Whitten.

Dear Sir:—The strawberry plants came in good shape and very quickly. Thanks for filling the order so quickly.

Hurriedly yours.

P. S. LaFevre.

BLACKBERRIES

Should be planted in rows six or seven feet apart and three to five feet in the rows. Keep the ground light and rich. Pinch the canes back when they have reached the height of from two to three feet.

Our blackberry plants are mostly "sucker" plants, except where marked "Root Cutting." These "sucker" plants are dug from between fruiting rows, or where "root cutting" plants have been taken leaving the broken roots in the ground which have thrown up shoots, or suckers as we term them. When properly dug with cross roots these make first class plants and prove about as satisfactory as, and at a much lower cost, than "root cuttings."

ELDORADO.—I head the list with this variety as I think it is entitled to that distinction. It having proved

ELDORADO.

to be the hardiest in cane of any of the larger berries that I have tested. It is free from **Orange Rust** or other disease, medium early in season, especially adapted to the home garden as it is large, juicy, and of good flavor and without the hard core of some varieties. It will also sell well in market, as it is jet black and holds its color well. This is becoming a very popular sort and the supply of plants is limited, not nearly enough to supply the demand.

I recommend it as the **very best** hardy sort we have grown in this section. Owing to shortage of plants this season we have had to advance the price somewhat,

although we are still lower than most of the wholesale nurseries on this variety.

Twenty-five, 50c; hundred, $1.75; thousand, $15.00.

EARLY KING.—An extra early blackberry, exceedingly hardy variety of great merit. Needs no winter protection, always producing large crops. Canes of a strong growth, as hardy as Snyder and very prolific. It is much larger than Early Harvest and its delicious sweetness renders it of special value for home use or market. It is also free from double bloom and other disease, and will go through hard spring frost in blossoming time without injury. Those who have tried this variety are well pleased.

Twenty-five, 35c; hundred, $1.25; thousand, $10.00.

SNYDER.—Very popular for the North and Northwest on account of its extreme hardiness; wonderfully productive, size medium, fruit juicy and sweet, without the hard core of many sorts, canes remarkably strong and thrifty.

Root cuttings plants: Twenty-five, 35c; hundred, $1.25; thousand, $10.00.

WILSON'S EARLY.—Of good size, very early, beautiful dark color, of sweet excellent flavor and very productive. Ripens the whole crop nearly together.

This variety is tender in cane and in northern latitudes will have to have winter protection. This is not such a serious job as some might think; if taken just before the leaves drop in fall and wood is still somewhat green, the canes in the hill can be gathered together and bent to the ground and tips covered with enough earth to hold them in this position. Always bend toward the prevailing winds as this will tend to hold the snow, if any. Commence at the far end of row and bend from you, but in line with the row, continuing this with each hill, letting top of one overlap the root of the previous one. Unless very dry few canes will be broken by this bending. After all are bent down, cover bows with strawy manure, or other litter, using enough to cover from sight; then, using a medium size turning plow with one horse, turn two furrows to each side of row, being careful not to plow deep enough to cut roots. This is usually sufficient, but it would be as well to go over the field with shovel covering any canes exposed. We do not cover to keep from **freezing**, but to prevent sun and wind drying out too much, thus evaporating the sap, or life fluid, from canes. This is the cause of injury more than intense cold. In the South this variety is hardy enough to stand without protection and is certainly one of the most profitable sorts for market. Our plants are No. 1 Sucker Plants.

Twenty-five, 25c; hundred, 75c; thousand $6.00.

EARLY HARVEST.—Is one of the earliest in cultivation; fruit medium size and fine quality; an enormous bearer. Not entirely hardy. Best in South.

Twenty-five, 25c; hundred, 75c; thousand, $6.00.

Otsego, Mich., May 10, 1907.

C. E. Whitten, Bridgman, Mich.

Kind Sir:—Received plants same day they were shipped. Came in first class condition. Never saw finer plants. Many thanks for the raspberries, which were equally as fine and strong plants.

Respectfully,

Jacob Tack.

DEWBERRIES

There is great diversity in methods given for the cultivation of this fruit. Some say train to stakes or wires; others to let lie on ground and grow at will, while still others advise cutting off all the growth to the ground immediately after fruiting, then allowing the bush to form for the next season's crop. I have never tried this latter method, but the Lucretia is such a rampant grower (often running 12 to 15 feet) that I have no doubt it would make plenty of wood before the growing season ended. This would be the easiest way to grow, if successful, as it would be very little work to clean out a field after fruiting as compared to having to work amongst the new vines if they should be left from early spring. Of course, the ground would have to be kept cultivated well while this growth was being made especially in **dry** location or season. I will also give the method described by J. W. Austin, of Texas, the originator of the Austin Dewberry. He says: "Select rather poor **clay,** or mixed soil, is best. A rich deep soil is all right for blackberries, but dewberries will bear two or three times as many large fine berries on their natural kind of soil, clay or clay mixed. Plant 18 inches apart in row and rows four feet apart in well prepared soil. Cultivate shallow to keep land sufficiently clean. Trimming is very important. First year continue to clip ends of vines off when ten or twelve inches long. Continue this through first summer which makes a round or bushy plant thick with firm fruit buds, which will bear a good paying crop the next year after being set out. Now note this carefully, when blooms are dropping and fruit begins to form clip off the new sprouts on the plants four or five inches from the ground or crown of plants, which will be from eight to twelve inches long at this time. Do this twice while fruit is growing and ripening as it keeps this growth out of the way of pickers and causes so much more substance to go into the fruit. Soon after fruit is gathered clip out all vines that bore fruit, close up to crown, and each season keep the plants rounded up same as first year, remembering to hoe and cultivate to keep land around plants clean. Planting on clay or mixed soil, close planting, close trimming and clean culture are the special features in growing dewberries successfully. I advise close planting because close pruning is necessary. The roots penetrate nearly straight down very deep into the soil, hence are not broken to cause suckers to come up like blackberries do. It is advisable to ridge the row up somewhat in cultivating also to scatter straw about the plants to keep the berries clean."

LUCRETIA.—This is counted as the **standard** of all dewberries, is earlier than the earliest blackberry and as large as the largest of them. The canes are of great hardiness and exceedingly prolific, thriving everywhere, of slender trailing habit and entirely free from disease and insect attacks. The fruit is large and handsome, jet black, rich and melting; ships well and keeps well. We picked these berries the past season with the raspberries, bringing $2.00 to $2.50 per sixteen-quart crate in Chicago market. I would advise my friends all to try at least a few of them in their gardens.

Twenty-five, 35c; hundred, $1.00; thousand, $8.00.

Mr. C. E. Whitten, Bridgman, Mich.

Dear Sir:—Plants arrived the 16th and were found in good condition, though delayed in transit. Thanks for your close attention to order.

Yours truly, Jesse W. Boulard.

CURRANTS

A cool moist location is best for this fruit, and for this reason succeeds admirably when planted by a stone wall or fence; being benefited by partial shade. Plant in rows four feet apart, and the plants three feet apart in the rows. Keep the ground mellow and free from weeds and grass, using fertilizer copiously. Mulching is necessary for the best returns.

PERFECTION.—This new Currant was originated by C. G. Hooker, of New York state, by crossing the Fays Prolific with the White Grape Currant. It has the large size of the Fay with the extra good quality and great productiveness of the White Grape. The color is beautiful bright red, and is less acid and of better quality than any other large currant in cultivation. Perfectly healthy, and a vigorous grower, and in fact the best currant for home use or market purposes under cultivation today. In July, 1901, it was awarded the $50 Barry gold medal by the Western New York Horticultural Society after a trial of three years. It also received the highest award given any new fruit at the Pan American Exposition, and it also received the only gold medal awarded to any currant at the St. Louis Exposition. It has also received a great many testimonials from the highest sources in this country. We show a natural size cluster of this fruit reproduced from a photograph taken at the New York Experiment Station. In other years this has been offered to the public at a prohibitive price (50c each,) with the restriction that the purchaser must not propagate from plants purchased. I would never list it with such "a string tied to it," but this season all restrictions are withdrawn and the price has been lowered so that our patrons can afford to test it. I think all who want **a fancy** fruit of this sort will do well to try a few. Two year plants.

Twelve, $1.75; twenty-five, $3.00; fifty, $6.00; hundred, $11.00.

WILDER.—A remarkable variety, for which we predict great popularity, both for table and market. One of the strongest growers and most productive. Bunch and berries very large, bright attractive red color, even when dead ripe; hangs on bushes in fine condition for handling as late as any known variety. Compared with the celebrated Fays, is equal in size, with longer bunch,

better in quality, with much less acidity; ripens at same time, continues on bush much longer; fully as prolific, in some trials largely outyielding it. Recommended by our Experiment Station as the best red currant. Strong one year plants.
Dozen, 60c; hundred, $3.50.

LONDON MARKET.—Of English origin. As compared with Victoria it is larger, more productive, much stronger grower, less infested with borers and retains its foliage until frost comes. It has produced twice the amount of fruit the Victoria did under same conditions; a very strong and upright grower. Strong plants.
Dozen, 60c; hundred, $3.50.

VICTORIA.—Large bright red; bunches extremely long, berries medium size, of excellent quality. Good erect grower. Very productive. Ripens late. Strong plants.
Dozen, 60c; hundred, $3.00.

GOOSEBERRIES

DOWNING.—This is without doubt the best Gooseberry for general cultivation that is offered today. It is an American or Native seedling, not an English sort. The latter are very hard to grow successfully in this climate on account of weak foliage which is very susceptible to mildew. When this disease attacks the Gooseberry it causes the foliage to drop before the berries are fully grown and materially injures the crop. Downing is a yellowish green sort and of good size, being a strong growing bush and a very prolific bearer. Plants of all varieties of Gooseberries are in light supply and in very good demand and the price is high. I can offer No. 1, 2 year size as follows:
Dozen, $1.50; twenty-five, $2.50; hundred, $8.00.

The Montana Agricultural Experiment Station,
Bozeman, Mont., April 24, 1907.
C. E. Whitten's Nurseries, Bridgman, Mich.
Gentlemen:—The strawberry plants and bush fruits arrived in excellent condition. Payment will be made immediately after May 1st. Very truly yours,
R. W. Fisher, Horticulturist.

Toledo, O., April 26, 1907.
Mr. C. E. Whitten.
Dear Sir:—Received my strawberry plants in fine order and will say they are fine plants and much ahead of the ———————— plants. You will hear from me later on. Yours respectfully,
A. E. Becker.

Marengo, Ohio, April 23, 1907.
C. E. Whitten, Bridgman, Mich.
Dear Sir:—Your card, also berry plants, received. Arrived Saturday evening but I did not get them till Monday morning. At this writing, Tuesday a. m., I have them nicely healed in awaiting a thorough preparation of the bed for planting. I found the plants in fine condition and to say I am pleased with the plants so far is putting it very mild indeed. I will do my best to secure a good crop of berries. Will report after fruiting them. Please accept thanks for honest work and a square deal.
Respectfully,
Wm. Springer.

GRAPE VINES

The Grape is one of the easiest fruits to grow and should be in all collections. When once well established vines will continue in bearing a long time with very little care other than the cutting back of the extra growth which should be done in winter or very early spring (before sap starts to circulate). This pruning is essential to the healthy growth of the vine and its fruitfulness. The grape is fast becoming a leading fruit in our section of Michigan and there is no reason why it should not be grown in many other sections of our Country. With such hardy varieties as Concord, Worden, and Niagara, **no one** need be without at least a few for the home use, as the vines can be taken off the trellis for the winter, and if covered lightly with some kind of mulch will stand the extremes of our northern climate. Owing to the very heavy demand and a material shortage of stock for this season the prices are somewhat higher than last year. My vines are all New York grown and will be first class, and of grade represented.

NIAGARA.—(White.)—Vine hardy, an unusually strong grower; bunches very large and compact, sometimes shouldered; berries as large or larger than Concord; mostly round, light greenish white; semi-transparent, slightly amber in sun, skin thick, but tough and does not crack; quality good; very little pulp, melting and sweet to the center. First-class one year plants.

Dozen, 60c; hundred, $3.50.

CONCORD.—A large, purplish black grape, ripening about the middle of September; vines remarkably vigor-

ous and free from disease; the standard for productiveness and hardiness all over the country.

One year, No. 1, dozen, 50c; hundred, $2.50. Two year, No. 1, dozen, 60c; hundred, $3.50.

WORDEN.—A splendid, large grape of the Concord type, but earlier, larger in bunch and berry, and of a decidedly better quality; vine hardier than that old standby and every way as healthy. A very popular sort, planted largely for the market; next to Concord in number used.

Fine one year plants, per dozen, 60c; hundred, $3.50. Two year old, per dozen, 75c; hundred, $4.00.

MOORE'S EARLY.—A black grape. Bunch large, berry round, quality better than the Concord; vine exceedingly hardy. Its earliness makes it desirable for an early crop, and more particularly adapts it for New England and the northern portion of the United States, maturing as it does ten days before the Hartford and twenty days before the Concord.

No. 1, one year, per dozen, 60c; hundred, $3.50.

BRIGHTON.—(Red.)—Perhaps the best red grape in cultivation. Bunch large and compact, a strong grower and very productive; quality good. First-class one year plants, dozen, 60c; hundred, $3.50.

TESTIMONIALS

Louisville, Ky., April 15, 1907.

Dear Sir:—I received the plants from the express office Wednesday evening, April 10th. They were all in good condition and I am very much obliged to you for your prompt delivery.

I am yours very truly,
August Gotta.

Oshkosh, Wis., May 10, 1907.

C. E. Whitten.

Dear Sir:—The plants you sent me Monday, I received Tuesday at 2 o'clock and they were fine. Had them all planted by Wednesday noon. Don't expect to lose one plant. They are all right. Am more than satisfied. Send me your catalogue next season.

Mrs. C. F. Hart.

Murphy, Mo., April 16, 1907.

Mr. C. E. Whitten.

Dear Sir:—Received your plants today and planted the same. I am very well satisfied with the plants for they are the finest I have ever received yet.

Yours respectfully,
John H. Barth.

Milford, Ind., May 4, 1907.

C. E. Whitten.

The package of strawberry plants sent me (through McClure's) arrived in good shape yesterday and are the nicest I ever received from a dealer.

Truly,
M. P. Wright.

ASPARAGUS ROOTS

Having had numerous inquiries for asparagus roots I have added these to our collection.

When planting asparagus roots, set 4 to 6 inches deep, and about 12 inches apart in the row, covering with only 3 inches of soil at first, and filling in the trenches as the plants grow.

The asparagus bed is apt to be neglected in the early fall. Before the 1st of September the tops should be cut and the bed or field cleared of weeds. It is highly important that all the seed should be taken off, as the greatest enemy the asparagus has in the way of weeds is asparagus, and it is almost impossible to get clear of superfluous plants, when once established. When this work is finished, cover the bed to the depth of three inches with coarse manure, which will not only enrich the soil, but it will keep out the frost, which is highly essential.

The first work in the spring should be to remove all the covering except the fine manure, which should be carefully forked in, so that the crowns will not be injured by the tines of the fork. Forking the beds should not be neglected, as the early admission of the sun and rain into the ground induces the plants to throw upshoots of superior size. Another step in the right direction is to keep the ground entirely free from weeds the entire season, as these take from the plants the strength required for their own growth, and the asparagus needs it all.

An application of salt in the spring is considered beneficial, and should be applied as soon as the ground is cleared.

PALMETTO.—A valuable new variety, and is being **planted very largely.** It is nearly twice the size of Conover, fully as early, and as productive. The flavor is excellent.

Hundred, 75c; thousand, $4.00.

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Hundred, 75c; thousand, $4.00.

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Hundred, $1.00; thousand, $5.00.

SEED POTATOES

I have only Rural New Yorker to offer this year. This variety is too well known to require much in the way of description. It is one of the late E. S. Carman's Seedlings. It is probably one of the heaviest yielders grown, and is the standard of excellence as a market or shipping sort. Its season is very late being an extremely long keeping potato; we have kept them in fair condition until August 1st in ordinary cellar. It is a clean white potato, of roundish form with very few and shallow eyes.

I will sell at $1.00 per bushel, including sacks or barrels.

BOOKS

Through arrangement with the publishers, I am able to offer the following books on Horticulture and kindred subjects at very reasonable rates. Any of these will be mailed postpaid at prices given.

AMATEUR FRUIT GROWING, by Samuel B. Green, a practical guide to the growing of fruit for home use and the market, written with special reference to a cold climate. **Illustrated, 134 pp. Price, 12 mo. cloth, $0.50; paper, 25c.**

LAWNS AND HOW TO MAKE THEM, by Leonard Barron. The only volume that treats the making and maintenance of the ornamental lawn from a purely practical standpoint. Deals with the digging and plowing of the lawn, the selection of site, seeding and turfing, and all of the other intimate facts that in the aggregate mean a sward of refreshing green. For the first time the whole subject of lawn seed mixture is set forth and explained. **Illustrated. $1.21 postpaid.**

HOW TO MAKE A FRUIT GARDEN by S. W. Fletcher. Illustrated with about 200 photographs. An eminently practical work on the subject of fruits for the home. Discusses all questions relating to the subject, such as the site and soil, selection of plants. tillage, fertilization, pruning and training of the trees, picking and storing of the fruit, growing of grapes and berries and other points relating to the care of the fruits. **182 photographic illustrations. $2.20 postpaid.**

VEGETABLE GARDENING, by Samuel B. Green, 7th edition. A manual on the growing of vegetables for home use and the market, **profusely illustrated. 252 pp. Price, 12 mo. cloth, $1.00; paper, 50 cents.**

POULTRY MANUAL, by Franklane L. Sewell, the world's famous poultry artist, and Ida E. Tilson. A guide to successful poultry keeping and a complete treatise on diseases of fowls with remedies. Also a chapter on farm poultry, coop building, etc. **12 mo. 168 pp. Price, 50 cents; paper, 25 cents.**

HOW TO MAKE A FLOWER GARDEN. 380 pages, illustrated with over 200 photographs. Various articles by experts on annuals, perennials, shrubs, vines, ferns, bulbs, roses, water garden, rock garden, home window garden, cold frames, hotbeds and the small greenhouse. **Over 200 photographic illustrations. $1.76 postpaid.**

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WELL PLEASED WITH THEM

Hastings, Mich., April 7, 1907.

Sir: We received the plants April 5. They are a fine lot and am well pleased with them. The express charges were $2.50. I consider that cheap considering the size of package. Yours truly, O. Blough.

Ludington, Mich., May 10, 1907.

Dear Sir: Received strawberry plants and asparagus plants all right on May 8, at 10:00 a. m. Put them in ground or planted them day received. All in good condition. Many thanks.

(Rev.) W. Westover.

322 N. Jas. St.

Perkasie, Pa., April 8, 1907.

C. E. Whitten's Nursery, Bridgman, Mich.

Dear Sir: My plants reached me on the 5th, and after taking them out of the box as directed by you on your card, would say I found them very nice. Am very well pleased with them and hope they will grow all right. Yours respectfully,

Chas. S. Rickert.

Creston, O., May 6, 1907.

C. E. Whitten, Bridgman, Mich.

Sir: The strawberry plants came in good condition. The varieties substituted are satisfactory. On account of wet weather we just finished setting plants today. Plants were very nice. Thank you for the extras.

Very truly yours,

S. A. Anderson.

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Variety.	25	100	1000
Abington	$0.15	$0.50	$3.00
Aroma	.20	.60	3.50
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Cardinal	.20	.60	3.50
Clyde	.20	.60	3.50
Dornan (Uncle Jim)	.20	.60	3.50
Excelsior	.15	.50	2.00
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Haverland	.15	.50	3.00
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Lovett	.15	.50	2.00
Marie	.15	.50	3.00
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Uncle Sam	.15	.50	3.00

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By Express or Freight only; charges not paid.

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Cuthbert	$0.25	$0.75	$5.00
Early King, red	.40	1.25	10.00
Eaton, red	doz., $1.50	2.25	7.50	50.00
Miller, red	.25	.65	4.50
Thompson's Early, red	.25	.60	4.00
Haymaker, purple	.50	1.75	——
Columbian, purple	.50	1.75	15.00
Cardinal, purple	.50	1.75	15.00
Cumberland, black	.35	1.00	8.00
Eureka, black	.35	1.00	——
Gregg, black	.35	.85	7.00
Conrath, black	.35	.85	7.00
Kansas, black	.30	.60	6.50
Palmer, black	.30	.75	6.50

BLACKBERRY PLANTS.

Variety.	25	100	1000
Eldorado	$0.40	$1.75	$15.00
Early King	.35	1.25	10.00
Snyder	.35	1.25	10.00
Wilson's Early	.25	.75	6.00
Early Harvest	.25	.60	5.00
Lucretia Dewberry	.35	1.00	8.00

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ORDER SHEET

_____ 190___

C. E. WHITTEN, Bridgman, Mich.

Please send plants named below to:

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Express Office _____

Express Co. _____

Freight Office _____

County _____

State _____

Amount enclosed:

P. O. Order $_____

Ex. M. Or. $_____

Draft $_____

Cash $_____

Total $_____

Ship by Express, Freight, Mail. Mark X across way you want plants shipped.

Number	VARIETY	PRICES Dollars	Cts.

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